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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/782,768	02/23/2004	Mitsuo Kubo	26010	7649
20529	7590	01/03/2006	EXAMINER	
NATH & ASSOCIATES 112 South West Street Alexandria, VA 22314			SEVER, ANDREW T	
			ART UNIT	PAPER NUMBER
			2851	

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/782,768	Applicant(s) KUBO ET AL.	
	Examiner Andrew T. Sever	Art Unit 2851	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 4-6 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Election was made **without** traverse in the reply filed on 7/11/2005.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Raskar et al. (US 6,755,537.)

Raskar teaches in figures 1, 2a, and 3 a projection display apparatus comprising:

A plurality of projection display units (part 100 shown in the plurality in figure 2a) for projecting and displaying images based on supplied video signals;

A non-planar screen (230) to which the projection display units project the images;

An image dividing unit (See column 4 lines 43-61 which teaches when used as a cluster of projectors the projectors divide a single image into a plurality of images that

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projected seamlessly together, inherently at least one unit or a unit on the network includes programming or a processor for dividing the image to achieve this result) for dividing an incoming video signal into divided video signals for the projection display units, respectively;

A three-dimensional measuring unit for measuring three-dimensional positions of the respective image projected and displayed by said plurality of projection display units to output a measurement result of the three-dimensional positions; (Each projector unit includes a camera sub-system (160) which in columns 5 and 6 is taught that the projectors determine the 3 dimensional position and shape of the display surface relative to the projectors) and

Image transforming means for changing the field angle of images represented with the divided video signals from the image dividing unit based on image transform quantities are determined based on the measurement result of the three-dimensional position output from the three-dimensional measuring unit and position information of an audience, so that a composite image on the non-planar screen composed of the images displayed by the plurality of projection display units becomes optimum when seen by the audience (see column 5 lines 20-67 which teaches a method of determining the 3D shaped of the surface to be projected upon and in column 6 lines 1-49 a transformation is developed as outlined in columns 11-14 which as outlined in column 5 lines 20-33 takes in consideration the audience seeing a optimized mosaic image); wherein

Each of the projection display units receive the changed video signal from the image transforming means and projects an image to the non-planar screen according to the received video signal (see column 15 lines 13-22).

With regards to applicant's claim 2:

Raskar teaches in column 4 lines 64-67 that one of the intended environments for the projection display apparatus is a dome which is a hemispherical surface and as outlined in column 5 lines 1-9 this system works when the projection display units are arranged on a straight line passing through the center as well as when the projectors are not placed in such a location. (The projectors can be placed in any location, which includes the claimed location.)

With regards to applicant's claim 3:

As shown in figure 1 the projectors each include memory (120) for storing the capture data, and a processor (110) for processing the information, the method/program utilized by these physical components to achieve the claimed results is outlined elsewhere in Raskar as outlined above (see figures 3, 4, 6-9, 11, and 12.)

Response to Arguments

4. Applicant's arguments with respect to claims 1-3 have been considered but are moot in view of the new ground(s) of rejection.

Raskar clearly teaches the 3D measurement unit, which is, utilized to transform the projected image.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

US 5,444,505 to Dorsey-Palmateer which teaches utilizing a laser scanner to determine the 3D location and shape of various components to be projected upon, see figure 1.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T. Sever whose telephone number is 571-272-2128. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571-272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS



William Perkey
Primary Examiner